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CENTRAL REGION CHANGE MANAGEMENT FOR INFORMATION TECHNOLOGY
(IT) SYSTEMS

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Director, Central Region

CR Change Management for IT Systems

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- 1. <u>Purpose</u>. The goal of the Central Region Change Management System (CRCMS) is to provide managed and predictable change to systems which have been designated as part of the CRCMS. Change management provides an opportunity for improved results by establishing a process for requirements validation and analysis; identification of optimal designs, solutions and operational approaches; improving coordination of planning, schedules, roles and responsibilities; optimized use of fiscal and personnel resources; management of system change implementation and subsequent operation and maintenance costs, and oversight and monitoring of system security controls.
- 2. <u>Scope and Relationship of Regional Change Management to National and Local Level Change Management Processes</u>

NATIONAL CHANGE MANAGEMENT: National Change Management policies and procedures apply to systems which have been identified as part of the National Change Management System and procedures established under Directive 30-12. Configuration Change Policy is established by the Assistant Administrator for Weather Services and managed by the Office of Operational Systems. Systems, software and communications which are not specifically identified as part of the National Change Management System are not subject to national policies found in NDS 30-12, but are subject to either regional or locally established policies and procedures for Change Management (see next below). Approved changes to national systems are generally issued as modification notes through the EMRS system, AWIPS TEST AUTHORIZATION NOTICES (ATAN), or similar official correspondence.

REGIONAL CHANGE MANAGEMENT: Central Region Change Management policies and procedures apply to systems which have been designated part of the Central Region Change Management System (CRCMS) and subject to applicable CRCMS policies and procedures. CRCMS policies and procedures described in the remainder of this procedure are established by the Regional Director and managed by the Systems and Facilities Division. Systems not specifically identified as part of the CRCMS are not subject to regional CM policies, but are subject to locally established policies and procedures for Local Change Management (see below). Approved changes to Regional

Systems under the CRCMS are issued as regional modification notes through the Field IT Tracking System (FITTS).

LOCAL CHANGE MANAGEMENT: Local offices need to establish local Configuration Management plans for system hardware, software and communications which are not subject to national or regional Change Management policies. This includes non-baseline software applications and capabilities in national systems such as AWIPS or regional systems. Configuration Change Policy is established by the MIC or HIC and managed locally by the Electronics System Analyst (ESA) or Information Technology Officer (ITO), depending on the particular system or software capability. Each office should decide what change management process best suits their needs, based on the extent and complexity of equipment to be managed.

- 3. <u>Central Region Change Management System</u> Only designated systems are included under CRCMS policies and procedures. A system can be proposed for incorporation into CRCMS by submitting to the Chief, Systems and Facilities Division, a <u>System Configuration Document</u>. This document at a minimum includes:
 - o System Name
 - A listing of system baseline components (software, hardware, communications, configuration settings, procedures, etc) that are subject to Central Region Change Management Policy, and their latest approved configuration specifications.
 - Listing of applicable security controls
 - An Operations Manager for the system responsible for categorizing requests (Minor, Moderate, Major, as defined in section 5), decision approvals for changes (Minor), or coordinating review of changes (Moderate or Major) for decision approval by CRH Division Chiefs (Moderate) or Regional Director (Major).
 - A Systems Manager for the system with implementation responsibility for all approved decision changes.

For those systems covered by CRCMS policies, Central Region offices shall maintain the approved configurations for each baseline component per the specifications contained in the System Configuration Document. MIC/HIC, ESA, ITO and CRH SFD personnel are authorized to approve and implement short term emergency changes to their local systems to meet critical mission requirements.

4. <u>Responsibilities</u>

- Regional Director
 - Approval level for Major category change request decisions
 - Approval level for appealed Minor and Moderate category change request decisions
- CRH Division Chiefs
 - Approval level for Moderate category change request decisions
- o Chief, Systems and Facilities Division
 - Oversight Responsibility for operation of the CRCMS, including,
 - o Point of Contact for systems proposed to be included in the CRCMS.

- o Ensuring that an approved <u>System Configuration Document</u> exists for each system that has been approved for inclusion in CRCMS.
- Ensuring that approved configuration specifications for defined baseline components are kept current.
- Provides support as needed to Operations Managers with classification of received change requests and approval/rejection actions on Minor category requests.
- Coordinates review of Moderate Requests for Change with applicable CRH staff and/or field MIC/HIC (as appropriate) for decision by CRH Division Chiefs.
- Coordinates review of Major Requests for Change with CRH divisions and field MIC/HIC for recommendations to the Regional Director.
- Provides support as needed to System Managers in change implementation, documentation and support activities.

Operations Manager

- Focal Point for receiving Change Requests for assigned system, facility or capability.
- Reviews Change Requests to determine MINOR, MODERATE, MAJOR classification
- In coordination with System Manager, approves/rejects MINOR classified Change Requests
- Coordinates consensus approval/rejection on MODERATE classified Change Requests.
- Forwards MAJOR classified Change Requests to Chief, SFD for regional action.
- Generally has service or science program background with focus on the service, science and operations requirements and impacts associated with the proposed change.

System Manager

- Implementation of approved system changes with regional modification notes and/or other forms of documentation via the Field IT Tracking System (FITTS)
- Responsibility for maintaining current configuration specifications for baseline components as listed in the <u>System Configuration Document</u>.
- Advises Operations Manager regarding technical issues pertaining to change requests.
- In most cases, responsible for subsequent technical support of system
- Generally has IT background with focus on the IT and system operation aspects of the proposed change.

o Division Chiefs, MIC/HIC

- Oversight responsibilities to ensure systems within their area covered by CRCMS policies are configured per current specifications in the appropriate System Configuration Document.
- Proposing systems to be included in the CRCMS.
- Ensures review and comment on proposed changes during review period (Moderate and Major Category) in coordination with WFO/RFC staff.
- Oversight responsibility for implementation of approved changes

- o ESA, ITO, CRH IT Personnel
 - Primary responsibility to ensure systems under their responsibility and covered by CRCMS policy are configured per current specifications in the appropriate <u>System Configuration Document</u>.
 - Focal point for submission of WFO/RFC change requests to the CRCMS, with approval of office MIC/HIC or Division Chief (as appropriate).
 - Responsible for implementation of changes that have been approved and released for implementation.

5. Change Approval Process

For every system that is subject to Central Region Change Management System policies, the following Change Approval Process will be used....

- SUBMITTAL: Requestor will submit change request electronically via the Central Region Change Management Web site http://intra.crh.noaa.gov/programs/systems/changmgmt/
- REVIEW AND DECISION: The Operations Manager for that system will analyze the requested change and determine whether the change is MINOR, MODERATE or MAJOR and then process the change request as described
 - MINOR: The proposed change does not have significant impact on customers, other NWS users, system impacts, personnel utilization or budget. Operations Managers should approve/disapprove MINOR CHANGES directly. Approved requests are submitted to the appropriate System Manager for implementation scheduling. Disapproved requests are returned to the requestor with explanation. Typical decision turnaround timeframe non-emergency requests of this type should be up to two weeks.
 - MODERATE: The proposed change has significant impact on customers, NWS users or systems, but minimal budget or personnel resources impact. Operations Managers will work with Chief SFD to coordinate review with appropriate CRH staff and MIC/HIC (as appropriate) and obtain Division Chief full consensus decision. Change request decisions that cannot reached through full consensus will be forwarded to the Regional Director for decision. Approved changes will be submitted to the appropriate System Manager for implementation scheduling. Disapproved changes are returned to the requestor with explanation. Typical decision turnaround timeframe for non-emergency requests of this type should be up to four weeks.
 - MAJOR: The proposed change has significant impact on customers, NWS users, systems, AND has significant budget or personnel resources impact. Operations Managers will work with

Chief SFD to coordinate full review with CR Division Chiefs and MIC/HIC and present recommendations to Regional Director for decision. Typical decision turnaround timeframe for non-emergency requests of this type should be up to six weeks.

For all levels of change requests (minor, moderate and major), the required time for actual implementation of an approved change will vary considerably based on the complexity of the change, its priority, personnel availability and funding required to implement.

- EMERGENCIES: All categories of proposed changes may be designated as emergency changes. Emergency changes are those that are required to restore an operational system or capability back to operation within its current baseline. Emergency change requests will be handled on an as soon as possible basis for both the approval and implementation processes.
- APPEAL: Rejected minor and moderate change requests may be appealed to the Regional Director for decision reconsideration.
- CRCMS MANAGEMENT: Implementation of approved changes are managed by Systems and Facilities Division, in coordination with the System Manager, Operations Manager and others as appropriate.
 Communication of approved changes will be accomplished via a regional modification note issued through the Field IT Tracking System (FITTS) or comparable system.